



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,054	08/04/2003	Satoru Shoshi	03463/HG	5523

1933 7590 12/16/2004

FRISHAUF, HOLTZ, GOODMAN & CHICK, PC  
767 THIRD AVENUE  
25TH FLOOR  
NEW YORK, NY 10017-2023

EXAMINER

AHMED, SHEEBA

ART UNIT PAPER NUMBER

1773

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/634,054

Applicant(s)

SHOSHI ET AL.

Examiner

Sheeba Ahmed

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3,5,7 and 9-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7 and 9-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Amendment*

1. Amendments to claims 1, 3, 5, and 7 have been entered in the above-identified application. Claims 2, 4, 6 and 8 have been cancelled. New claims 9-24 have been added. **Claims 1, 3, 5, 7, and 9-24 are now pending.**

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 3, 5, 7, and 9-24 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a hard coat film comprising a substrate having a thickness of 20 to 300 microns and a hard coat layer having a thickness of 2 to 20 microns thereon wherein the hard coat layer comprises 100 parts of an ionizing radiation curable resin and 0.1 to 10 parts by weight of a nonionic surfactant having a HLB of 2 to 15, does not reasonably provide enablement for a hard coat film comprising a substrate and a hard coat layer thereon wherein the hard coat layer has a thickness of 2 to 20 microns and comprises 100 parts of an ionizing radiation curable resin and a nonionic surfactant having a HLB of 2 to 15. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

Page 16, lines 13-20 of the Specification of the instant application state that the thickness of the substrate film is in the range of 20 to 300 microns and when the thickness is smaller than 20 microns, the mechanical strength is insufficient and there is the possibility that the deformation by the input by a pen is excessively great and durability is insufficient when the hard coat film is used for a touch panel and when the thickness exceeds 300 microns, the pressure required to deform the film increases when the hard coat film is used for a touch panel. **"Therefore, a thickness outside the above range is not preferable".**

Page 9, lines 23-26 to Page 10, lines 104 state that 0.1 to 10 parts by weight of (B) a nonionic surfactant is required and "when the amount of the nonionic surfactant is less than 0.1 part by weight, the effect of adding the nonionic surfactant is not exhibited. When the amount exceeds 10 parts by weight, the properties of the hard coat layer in the hard coat film of the present invention deteriorate. **Therefore, an amount outside the above range is not suitable as the amount of the nonionic surfactant used in the present invention".**

Hence, all the above-discussed limitations are critical to the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3, 5, 7, and 9-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 states that the hard coat layer "is formed by applying a coating fluid comprising 100 parts by weight of (A) a resin of an ionizing radiation curing type" to form a coating layer wherein the coating layer is cured with an ionizing radiation. However, it is unclear whether the applied "resin of an ionizing radiation curing type" is already a "cured resin" or is a "ionizing radiation curable monomer or prepolymer". The recitation of the various Markush groups adds to the ambiguity. Appropriate correction is required.

Furthermore, the use of the terms "type" and "based" in claims 1, 9, 10, and 21 render the claims indefinite because it is unclear whether the limitation(s) preceding the phrase are part of the claimed invention.

In addition, the Markush group listed in claim 9 and recited as (b) (ii) should recite a prepolymer of a cationic polymerization selected from the group consisting of ..... and a compound obtained by oxidation of a linear olefin compound **or** a cyclic olefin compound with a peroxide" and not "a compound obtained by oxidation of a linear olefin compound **and** a cyclic olefin compound with a peroxide". See Page 8, lines 13-18 of the instant Specification.

### ***Response to Arguments***

4. Applicant's arguments filed on September 16, 2004 have been fully considered but they are not persuasive. Applicants argue that the substrate thickness of 20 to 300 microns is only an additional feature for applying the hard coat film to touch panels and hence is not critical. However, the Examiner disagrees. Page 16, lines 13-20 of the Specification of the instant application state that the thickness of the substrate film is in

Art Unit: 1773

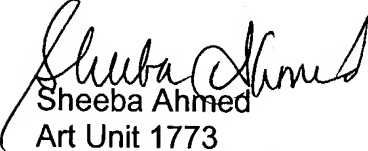
the range of 20 to 300 microns and **a thickness outside the above range is not preferable**" indicating that such a feature is critical to the invention.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (571)272-1504. The examiner can normally be reached on Mondays and Thursdays from 9:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571)272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

  
Sheeba Ahmed  
Art Unit 1773  
December 9, 2004